Reply to Office Action of August 10, 2009

## **REMARKS/ARGUMENTS**

Claims 2 and 5-12 are pending. By this Amendment, claim 2, 5, 7, and 9-12 are amended and claims 4, 17-26, and 28 are canceled without prejudice or disclaimer. No new matter is added. Support for the claims can be found throughout the specification, including the original claims, and the drawings. Reconsideration in view of the above amendments and following remarks is respectfully requested.

Entry of the amended claims is proper under 37 C.F.R. §1.116 since the amendments: (1) place the application in condition for allowance for the reasons discussed herein; (2) do not raise any new issues requiring further search and/or consideration since the amendments amplify issues previously discussed throughout prosecution without incorporating additional subject matter; (3) satisfy a requirement of form asserted in the previous Office Action; and/or (4) place the application in better form for appeal, if necessary. Entry is thus requested.

The Office Action rejected claim 2 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the enablement requirement. The rejection is respectfully traversed.

The Office Action acknowledged that "[t]he specification [discloses] repeatedly rotating the compressor in [a] second [rotation] direction at pre-set time periods, but does not disclose repeatedly stopping the compressor at pre-set time [periods] after a single defrosting operation," referring to Figs. 2, 7, 9, 13-16, and 19. However, the specification discloses, when an operation mode of a refrigerator is selected by a user, rotating the compressor of the refrigerator counterclockwise (claimed second rotation direction), and repeatedly stopping it. That is,

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referring, for example, to pages 8-10 and Figure 2 of the present application, the specification discloses, when the defrosting operation is terminated, rotating the compressor of the refrigerator clockwise (claimed first rotation direction) to quickly lower the temperature inside the refrigerator, which has been raised according to the defrosting operation, to the pre-set temperature, and then, rotating the compressor counterclockwise (claimed second rotation direction) repeatedly at every pre-set period to maintain the current temperature state inside the refrigerator. See, for example, page 8, lines 20-22 and page 9, lines 18-24 of the specification. It is respectfully submitted that rotating the compressor in the second rotation direction repeatedly at every pre-set period inherently requires stopping the compressor. Accordingly, this rejection should be withdrawn.

The Office Action rejected claims 2, 4-12, 17-23, 25-26, and 28 under 35 U.S.C. §103(a) as being unpatentable over Loprete et al. (hereinafter "Loprete"), U.S. Patent No. 6,591,621. Claims 4, 17-23, and 25-26 have been canceled, and the features of claim 4 have been added to independent claim 2. The rejection is respectfully traversed insofar as it applies to the claims 2 and 5-12.

Independent claim 2 recites, *inter alia*, when an operation mode of the refrigerator is selected by a user, selecting the rotation direction of the compressor according to an amount of cooling air supply corresponding to the selected operation mode, and <u>controlling a rotation</u> speed of the compressor in the selected rotation direction by varying an operation frequency of the compressor based on a temperature inside the refrigerator. Loprete does not disclose or

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suggest at least such features of independent claim 2, or the claimed combination.

In the rejection of claim 4 in the Office Action at page 4-5, the Examiner asserted that the features of claim 4 are disclosed by Loprete in column 4, lines 38-44 and column 25, lines 13-17. However, none of these passages disclose or suggest such features, in particular, in combination with the other claimed features of independent claim 1.

That is, in column 4, lines 38-44, Loprete merely discloses that a compressor is selectively operated either in a forward direction, comparable to the claimed first rotation direction, at a first preselected fixed power load or in a reverse direction, comparable to the claimed second rotation direction, at a second preselected fixed power load that is less than the first power load. In column 25, lines 13-17, Loprete merely disclose that a control system includes a thermostat 228, and is electrically connected to motors of the compressor, a blower, and a fan, as well as to an expansion device. There is no disclosure or suggestion in Loprete that a rotation speed of the compressor in the forward diction or in the reverse direction is controlled by varying an operational frequency of the compressor. With the claimed features, by controlling a rotation speed of the compressor in the selected direction by varying the operation frequency of the compressor based on a temperature inside the refrigerator, the temperature inside the refrigerator can be precisely controlled. Therefore, Loprete dose not disclose or suggest at least such claimed features of independent claim 2, or the claimed combination.

Accordingly, the rejection of independent claim 2 over Loprete should be withdrawn.

Dependent claims 5-12 are allowable over loprete at least for the reasons discussed above with

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respect to independent claim 2, from which they depend, as well as for their added features.

The Office Action rejected claim 24 as being unpatentable over Loprete, in view of D'Entremont et al. (hereinafter "D'Entremont"), U.S. Patent No. 5,200,872. As noted above, claim 24 has been canceled, and therefore, this rejection is moot and should be withdrawn.

## **CONCLUSION**

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited.

If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney at the telephone number listed below.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,

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